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EXAMINER

DELCOTTO, GREGORY R

ART UNIT PAPER NUMBER

1751

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/500,469

Applicant(s)

AIHARA ET AL.

Examiner

Gregory R. Del Cotto

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-11 are pending. Applicant's arguments and amendments filed 4/27/06 have been entered.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Objections/Rejections Withdrawn

The following objections/rejections as set forth in the Office action mailed 10/31/05 have been withdrawn:

The rejection of claims 1-10 under 35 U.S.C. 102(a) as being anticipated by WO02/16356 has been withdrawn.

The rejection of claims 1-3 and 6 under 35 U.S.C. 102(b) as being anticipated by Adler et al (US 5,308,532) has been withdrawn.

Claim Objections

Claims 1-11 are objected to because of the following informalities:

With respect to claim 1, Applicant has not deleted the actual molecular structure for Formula (2) which should be deleted since all other substituents and language relating to Formula (2) in claim 1 has been deleted.

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Appropriate correction is required. Note that, claims 2-11 have also been objected to due to their dependency on claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 5, 6, and 8-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Jeschke et al (US 6,251,849).

Jeschke et al teach the use of water-based cleaners for hard surfaces containing from 0.01 to 10% by weight of cationic polymers containing monomer units having the same formula as recited by the instant claims, and 0.1 to 50% by weight of one or more nonionic surfactants. See column 2, line 30 to column 3, line 15. Additionally, the cleaning compositions may contain auxiliaries such as solvents in ethanol, isopropanol, glycol ether, etc. See column 4, lines 50-69. In one embodiment, the cleaner is formulated as a ready-to-use solution which may be used as a spray cleaner. The cleaners are suitable as both multipurpose cleaners and as manual dishwashing detergents. The cleaners are particularly suitable for cleaning hard surfaces such as enamel, glass, china, linoleum, ceramic tiles, marble, metals, etc. See column 5, lines 55-69. Note that, the Examiner asserts that multi-purpose cleaning and ceramic tiles as taught by Jeschke et al would suggest substrates such as toilet bowls as recited by instant claim 7.

Specifically, Jeschke et al teach a bath cleaning in the mildly acidic range containing 3.85% of a C8-C10 alkyl polyglucoside, 1% of a C12-C14 fatty alcohol ether having 6 moles of EO, 1% sodium hydroxide, 1% ethanol, 0.3% of various polymers which contain the same monomers as recited by the instant claims, 0.2% preservative, 0.9% perfume oil and the balance water. The Examiner asserts that the polymers as used in the Examples taught by Jeschke et al would inherently have the same molecular weight as recited by the instant claims because Jeschke et al teach polymers containing the same monomer units as recited by the instant claims and the instant claims recite polymers having a wide range of molecular weights. Additionally, note

that, the Examiner asserts that Jeschke et al inherently teach compositions having the same antifouling properties as recited by the instant claims because Jeschke et al teach compositions containing the same components in the same proportions as recited by the instant claims. Jeschke et al disclose the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the teachings of Jeschke et al anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of Jeschke et al are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the molecular weight of the polymer as recited by the instant claims in order to provide the optimum cleaning properties to the composition since Jeschke et al teach that the type of polymers added to the composition may be varied.

Claims 1-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP-2001-271094. An oral translation of this reference was given to the Examiner on 10/26/05 and a written translation of this document has been requested.

'094 teaches detergent compositions for cleaning hard surfaces containing a copolymer and surfactants. The detergent composition may also contain a solvent. The detergent composition is used for cleaning bathrooms, wash stands, and kitchen sinks. The detergent composition has high detergency and the effect of preventing

adhesion of stain. See Abstract. Note that, the polymers are made up of the same monomers as recited by instant claim 1.

The Examiner asserts that the polymers as used in the Examples taught by '094 would inherently have the same molecular weight as recited by the instant claims because '094 teaches polymers containing the same monomer units as recited by the instant claims and the instant claims recite polymers having a wide range of molecular weights. '094 discloses the claimed invention with sufficient specificity to constitute anticipation. Note that, the Examiner asserts that '094 teaches compositions inherently having the same antifouling properties as recited by the instant claims because '094 teaches compositions containing the same components in the same proportions as recited by the instant claims.

Accordingly, the teachings of '094 anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of '094 are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the molecular weight of the polymer as recited by the instant claims in order to provide the optimum cleaning properties to the composition since '094 teach that the type of polymers added to the composition may be varied.

Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeschke et al (US 6,251,849).

Jeschke et al are relied upon as set forth above. However, Jeschke et al do not teach, with sufficient specificity, a method of cleaning toilet bowls using a composition as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to clean toilet bowls using a composition as recited by the instant claims, with a reasonable expectation of success, because Jeschke et al suggest a method of cleaning toilet bowls using a composition as recited by the instant claims.

Claims 1-3, 5, 6, and 8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Aubay et al (6,593,288).

Aubay et al teach the use of a water-soluble or water-dispersible copolymer comprising monomers including dimethyldiallylammonium chloride, at least one hydrophilic monomer, and optionally at least one hydrophilic monomer compound containing ethylenic unsaturation and of neutral charge, on hard surfaces to give a hard surface hydrophilic properties. See Abstract. The copolymer preferably has a molecular weight of at least 1000, advantageously of at least 10,000. See column 3, lines 35-45. The copolymers are used in compositions for cleaning ceramics such as bathrooms, sinks, shower walls, toilet pans, etc. See column 5, lines 40-55. Additionally, the compositions contain surfactants. See column 11, lines 50-65. Specifically, Aubay et al teach a detergent formulation for cleaning hard surfaces such as tiles, sinks, baths, etc. containing 24% sodium sulfonate, 5% ethoxylated C12 fatty alcohol, 4% ethanol, polymer, and water. Aubay et al discloses the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the teachings of Aubay et al anticipate the material limitations of the instant claims.

Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aubay et al (US 6,593,288).

Aubay et al are relied upon as set forth above. However, Aubay et al do not teach with sufficient specificity, a method of cleaning toilet bowls using the specific polymer-containing composition as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to clean toilet bowls using the specific polymer-containing composition as recited by the instant claims, with a reasonable expectation of success, because Aubay et al teach cleaning hard surfaces typically found in the bathroom such as tiles, baths, etc. which would also suggest toilet bowls, and further, Aubay et al teach the use of cleaning toilet pans which are nearly the same as toilet bowls.

Response to Arguments

With respect to Jeschke et al and JP 01-271094, Applicant states that neither reference teaches the specific monomer or polymer having a specific molecular weight as now recited by the instant claims. In response, note the, Jeschke et al teach that the substituent R2, R3, and/or R4 may be an alkenyl unit which is the same as R4 as recited by the instant claims. Additionally, the Examiner asserts, as set forth above, that the polymers as taught by Jeschke et al or '094 would inherently have the same molecular weight as recited by the instant claims because Jeschke et al or '094 teach, with sufficient specificity, the same polymers having the same amount of monomers as

recited by the instant claims. Applicant has provided no data showing that the polymers of either reference do not have the same molecular weights as recited by the instant claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gregory R. Del Cotto
Primary Examiner
Art Unit 1751

GRD
July 24, 2006